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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/801,771	03/16/2004	Timothy L. Stewart	2170983-000006	3133

49840 7590 02/12/2007
BAKER, DONELSON, BEARMAN, CALDWELL & BERKOWITZ
SUITE 3100 SIX CONCOURSE PARKWAY
ATLANTA, GA 30328

EXAMINER

LITHGOW, THOMAS M

ART UNIT	PAPER NUMBER
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1724

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/12/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/801,771	Applicant(s) STEWART, TIMOTHY L.	
	Examiner Thomas M. Lithgow	Art Unit 1724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 November 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) none is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

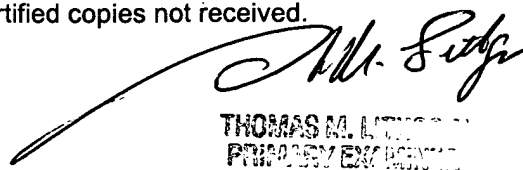
- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.


THOMAS M. LITHGOW
PRIMARY EXAMINER
(2007-1724)

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-9 and 11-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ramirez (US 4031006) in view of Petit (US 5766484). Ramirez '006 discloses the flotation separation of meat rendering wastewaters [col. 1, line 14] in which, as shown schematically in fig. 4, there is a feed water stream at 71, a cylindrical mixing chamber 12 where recycle water and influent water are mixed, flocculant addition at 51 [col. 8, lines 24+] and flotation in the cell 52. The recycle water portion is directed through line 55 where an ionic species (alum, ferric sulfate, sulfuric acid, calcium hydroxide), and a coagulant [col. 6, line 18] are added via pump 63. It is noted that many pH agents are also coagulants based on applicant's disclosure. The chemically treated recycle water is then mixed with air in any number of air dispersers (fig. 5-7) or dissolver (fig. 8) at 61 which may or may not involve pumping, the aerated, treated recycle water

is then sent to the mixer 12 as described before. Ramirez's '006 flotation tank is a conventional rectangular type with the treated wastewater being discharged at the end opposite the influent feed end of the flotation tank (fig. 4- see 54). Petit '484 discloses the advantageous flow patterns resulting from discharging the clarified effluent from the influent end [abstract] as opposed to conventional methods which discharge at the opposite end. It would have been obvious to one of ordinary skill to discharge clarified water to be recycled [col. 3, lines 28+] at the same end of the flotation tank as the influent feed as disclosed in Petit '484.

Applicant's arguments can be condensed down to two assertions. Firstly, Ramirez '006 fails to disclose non-dissolved air in his process and secondly Ramirez '006 does not discharge water to be recycled from his influent end. It is axiomatic that a "dispersed" air stream in water is at least in part "non-dissolved" as recited in the claims. As such, the limitation is expressly taught by Ramirez '006. Petit '484 teaches the other aspect of claims 1 and 17 as noted above.

3. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art as applied to claim 7 above, and further in view of Dixon (US 5308499). Dixon teaches the use of polyamine flocculants to clarify

water containing protein contaminants (wool scour effluent) by flotation using polyamines [col. 2, lines 55-63]. To employ such a flocculant in the Ramirez '006 process in which protein containing waste water (meat packing effluent) is purified by flotation would have been obvious to one of ordinary skill in the art. Applicant asserts that Ramirez '006 is deficient for failing to disclose the use of non-dissolved air. This is not persuasive for reasons given previously.

Response to Arguments

4. Applicant's arguments filed 24 Nov. 2006 have been fully considered but they are not persuasive. The arguments are addressed in the individual rejections above.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas M. Lithgow whose telephone number is 571-272-1162. The examiner can normally be reached on Mon. -Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on 571-272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Thomas M. Lithgow
Primary Examiner
Art Unit 1724

TML